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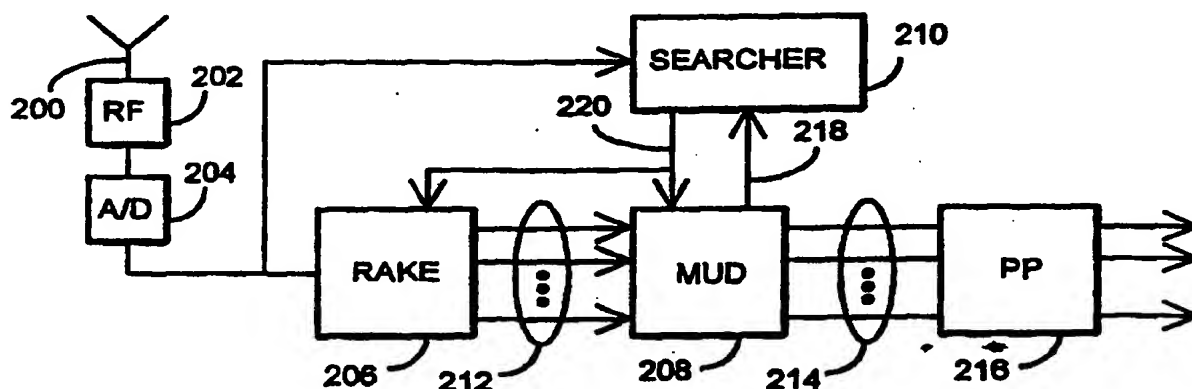
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## (57) Abstract

The invention relates to a reception method and a receiver in a system comprising in each cell a base station communicating with terminals located in its area. A received signal comprises a sum signal of signals originating from several transmitters. The receiver comprises means (208) for performing interference elimination and a simultaneous multi-user detection to the signal and means (210) for searching signal parameters. In order to reduce the required computational capacity, the receiver further comprises means (210) for removing the effect of the signals of the known users from the received sum signal, and means (210) for estimating the parameters of the unknown signals from a narrowband residual signal.

## ABSTRACT

The invention relates to a reception method and a receiver in a system comprising in each cell a base station communicating with terminals located in its area. A received signal comprises a sum signal of signals originating from several transmitters. The receiver comprises means for performing interference elimination and a simultaneous multi-user detection to the signal and means for searching signal parameters. In order to reduce the required computational capacity, the receiver further comprises means for removing the effect of the signals of the known users from the received sum signal, and means for estimating the parameters of the unknown signals from a narrowband residual signal.